

(FILE 'USPAT' ENTERED AT 13:54:26 ON 18 JAN 1999)

L1	19	KERATINOCYT? (5A) CLONAL
L2	139	(MEDIUM OR MEDIA) (5A) TOPICAL?
L3	516	(CULTURE (W) (MEDIA OR MEDIUM)) (P) (PHARMACEUT? OR TOPICAL? O
R C		
L4	129	(CULTURE (W) (MEDIA OR MEDIUM)) (10A) (PHARMACEUT? OR TOPICAL?
OR		
L5	124	L4 NOT L2
L6	8	((SERUM FREE) (5A) (MEDIA OR MEDIUM)) (P) (WOUND? (5A) HEAL?)

(FILE 'HOME' ENTERED AT 14:42:40 ON 18 JAN 1999)

FILE 'BIOSIS, CAPLUS, MEDLINE, WPIDS' ENTERED AT 14:43:05 ON 18 JAN 1999

L1	196 ((SERUM FREE) (5A) (MEDIA OR MEDIUM)) AND (WOUND? (5A) HEAL?)
L2	124 DUPLICATE REMOVE L1 (72 DUPLICATES REMOVED)
L3	9 ((SERUM FREE) (5A) (MEDIA OR MEDIUM)) (10A) (TOPICAL? OR PHAR
L4	7 DUPLICATE REMOVE L3 (2 DUPLICATES REMOVED)

81. 5,371,089, Dec. 6, 1994, Method and composition for ameliorating the adverse effects of aging; Suresh I. S. Rattan, 514/261, 266, 844 [IMAGE AVAILABLE]

US PAT NO: 5,371,089 [IMAGE AVAILABLE]

L5: 81 of 124

ABSTRACT:

Compositions and methods are provided for countering the adverse effects of aging on cells in culture and in vivo in which cells are contacted with the compositions that ameliorate the adverse effects of aging on mammalian cells by slowing or reversing the changes that normally accompanying aging of such cells but do not significantly increase the growth rate or total proliferative capacity of such cells. The compositions contain one or more 6-(substituted amino)purine cytokinins and preferably do not contain ingredients that promote cell division or that induce or potentiate the ability of the 6-(substituted amino) purine cytokinins to promote cell division.

Among the preferred applications of the compositions and methods provided herein are the preservation of or restoration of the health of mammalian cells in culture and, by application of the compositions to human skin,

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4. 5,591,709, Jan. 7, 1997, Compositions and methods for treating wounds; Ella Lindenbaum, 514/4; 424/484, 486, 487, 488; 514/3, 12, 21, 567 [IMAGE AVAILABLE]

US PAT NO: 5,591,709 [IMAGE AVAILABLE]

L6: 4 of 8

ABSTRACT:

The present invention relates to wound treatment formulations and methods for treating wounds utilizing these formulations. The formulations according to the present invention are useful for treating wounds by accelerating wound healing. These formulations generally comprise an effective amount of a non-steroidal anabolic hormone such as insulin, growth hormone, triiodothyronine, thyroxine or mixtures thereof, in combination with a cellular nutrient medium, preferably MCDB 153.

2. 5,681,561, Oct. 28, 1997, Compositions and methods for improving autologous fat grafting; Bernard Hirshowitz, et al., 424/93.7, 574; 514/2, 21 [IMAGE AVAILABLE]

US PAT NO: 5,681,561 [IMAGE AVAILABLE]

L6: 2 of 8

ABSTRACT:

The present invention relates to compositions and methods for enhancing the success of autologous fat grafting in a patient. The compositions according to the present invention are useful for enhancing autologous fat grafting by improving the survival rate of lipocytes which are injected into a patient as part of a fat grafting procedure. These compositions comprise a fat grafting effective amount of autologous lipocytes in combination with a lipocyte growth effective amount of a non-steroidal anabolic hormone selected from insulin, triiodothyronine/thyroxine (T.sub.3 or T.sub.4), mixtures thereof, and optionally, growth hormone, most preferably a mixture of all three hormones because of the favorable effect these three hormones exhibit in combination to promote autologous fat grafting, the hormones being further combined with a lipocyte growth effective amount of a nutrient medium, preferably a serum free nutrient medium as at least a minimum essential medium.

**serum-free cell culture medium** was supplemented with non-steroidal anabolic hormones, growth hormone, thyroxin and insulin, transferrin and sodium selenite. The medium was prepared in a 1 per cent alginate gel matrix. Under general anaesthesia with ketamine (Imalgene 1000, Rhone Merieux, France) four 2 times 2 cm full-thickness skin patches were surgically extirpated from the dorsum of Hartley-derived guinea-pigs. Each experimental group consisted of seven animals, i.e. 28 wounds that received the same treatment. Compositions of gelatin in saline, agarose in saline, agarose in medium and agarose in saline supplemented with the three hormones were compared to agarose in medium supplemented with the three hormones. After application of the gel (1 ml/cm<sup>2</sup>), the wounds were dressed with gauze, elastic adhesive bandage and netting. Change of bandage and administration of gel were performed every 48 h under general anaesthesia, at which time all the wounds were washed with warm saline, measured, photographed and redressed as above. Computerized morphometric measurements of the photographs of each wound, in sequence, were made using ImageMeasure software. The dynamics of wound closure were quantified, analysed and plotted. The agarose in medium supplemented with the three anabolic hormones induce statistically significant (P < 0.001) acceleration of wound closure when compared to controls. No statistically significant difference was found among the controls.

L2 ANSWER 54 OF 124 CAPLUS COPYRIGHT 1999 ACS DUPLICATE 23  
 AN 1993:240954 CAPLUS  
 DN 118:240954  
 TI Compositions and methods for treating wounds  
 IN Lindenbaum, Ella  
 PA Life Medical Sciences, Inc., USA  
 SO PCT Int. Appl., 46 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9304691	A1	19930318	WO 92-US7341	19920828
	W: AT, AU, BB, BG, BR, CA, CH, CS, DE, DK, ES, FI, GB, HU, JP, KP, KR, LK, LU, MG, MN, MW, NL, NO, PL, RO, RU, SD, SE				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, SN, TD, TG				
	HU 67319	A2	19950328	HU 94-593	19920228
	AU 9225879	A1	19930405	AU 92-25879	19920828
	AU 670413	B2	19960718		
	BR 9206433	A	19940927	BR 92-6433	19920828
	JP 06510453	T2	19941124	JP 92-505336	19920828
	NO 9400406	A	19940328	NO 94-406	19940208
PRAI	US 91-752849		19910830		
	WO 92-US7341		19920828		

AB The formulations of the invention are useful for treating wounds by accelerating wound healing. The formulations comprise an effective amt. of a cellular growth-stimulating compd. (growth hormone, insulin, transforming growth factor, epithelial growth factor, etc.) (concn. > 0.05 ng/mL) in a (serum-free) cellular nutrient medium. Thus, a lyophilized powder of MCDB 153 medium was reconstituted with distd., sterilized water and supplemented with human growth hormone to a final concn. of approx. 0.5-2 ng/mL; in certain formulations, an amt. of insulin-transferrin was added to a final concn. of approx. 200 ng/mL. In some instances, approx. 1 wt.% gelatin or collagen was added to provide a gel product for delivery. The formulation was used to treat e.g. a patient having a heel decubitus-pressure wound. Modified serum-

**free** culture **medium** supplemented with nonsteroidal  
anabolic hormone was tested for **wound healing**  
activity in animal studies.

L2 ANSWER 33 OF 124 CAPLUS COPYRIGHT 1999 ACS DUPLICATE 13  
 AN 1995:958515 CAPLUS  
 DN 123:350357  
 TI **Wound healing** compositions containing cell  
 culture medium and growth hormones  
 IN Lindenbaum, Ella  
 PA Life Medical Science, Inc., USA  
 SO U.S., 9 pp.  
 CODEN: USXXAM  
 DT Patent  
 LA English  
 FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5461030	A	19951024	US 93-158808	19931129
	US 5591709	A	19970107	US 95-374944	19950118
PRAI	IL 91-97127		19910201		
	US 91-752849		19910830		
	US 92-937486		19920828		
	US 93-25216		19930302		
	US 93-158808		19931129		

AB The title formulations are useful for treating **wounds** by accelerating **wound healing**. These formulations comprise an effective amt. of a **serum free** cellular nutrient **medium** in combination with an effective amt. of at least one cellular growth stimulating compd., e.g. a natural anabolic hormone or transforming growth factor. Thus, 100 g of lyophilized powder of MCDB 153 culture medium was reconstituted with water and supplemented with human growth hormone to final concn. of 0.5-2 ng/mL. In certain formulations insulin-transferrin was added to final concn. of 5.mu.g/mL and collagen or gelatin at 4% concn. The compns. were effective in treatment of pressure wound and skin ulcers.

L2 ANSWER 42 OF 124 BIOSIS COPYRIGHT 1999 BIOSIS DUPLICATE 16  
 AN 1995:181969 BIOSIS  
 DN PREV199598196269  
 TI **Serum-free** cell culture **medium** induces  
 acceleration of **wound healing** in guinea-pigs.  
 AU Lindenbaum, E. S. (1); Tendler, M.; Beach, D.  
 CS (1) Fac. Med., Technion, POB 9649 Haifa Israel  
 SO Burns, (1995) Vol. 21, No. 2, pp. 110-115.  
 ISSN: 0305-4179.

DT Article  
 LA English

AB Among the current methods employed in the treatment of wounds, a moist dressing is considered to be the optimal environment for the process of **healing** thereby avoiding desiccation of the **wound** bed. This study is based on the hypothesis that wound cell proliferation is dependent not only on moisture but also upon the composition of the moist microenvironment in the wound. That composition in turn is formed by diffusion of nutrients from the existing vascular bed in and around the wound as well as by the wound cells' cellular products. Since in wounds the impaired vascular supply causes tissue deprivation, a continuous supply of nutrients and hormones will create an optimal substrate for cellular mitogenic activity, synthesis of matrix, growth factors and cytokines leading to **wound healing**. Modified



123. 4,385,049, May 24, 1983, Stable high internal phase ratio topical emulsions; Robert C. Cuca, 514/786, 777, 784, 785, 939, 941 [IMAGE AVAILABLE]

US PAT NO: 4,385,049 [IMAGE AVAILABLE]

L2: 123 of 139

ABSTRACT:

Delivery systems for topical preparations which are commercially stable. The emulsions are water-in-oil in which the water phase comprises at least 75% of the emulsion by volume. The emulsifier is a nonionic oil soluble straight or branched chain ester or combination thereof composition having at least two hydrogen bonding sites per molecule.

1. 5,834,312, Nov. 10, 1998, Process and media for the growth of human epithelia; John J. Wille, Jr., 435/405, 325, 383, 384, 404 [IMAGE AVAILABLE]
2. 5,814,511, Sep. 29, 1998, Human breast epithelial cell type with stem cell and luminal epithelial cell characteristics; Chia-Cheng Chang, et al., 435/371, 378, 380, 387, 405, 406 [IMAGE AVAILABLE]
3. 5,795,781, Aug. 18, 1998, Cell competency solution for use in the formation of a histologically-complete, living, human skin substitute; John Jacob Wille, Jr., 435/404, 383; 623/15 [IMAGE AVAILABLE]
4. 5,741,642, Apr. 21, 1998, Assay for detecting the expression of a gene encoding human keratinocyte growth factor (KGF); Jeffrey S. Rubin, et al., 435/6, 91.2; 536/23.1, 24.3, 24.33 [IMAGE AVAILABLE]
5. 5,731,170, Mar. 24, 1998, DNA encoding a growth factor specific for epithelial cells; Jeffrey S. Rubin, et al., 435/69.4, 69.7, 71.1, 252.3, 252.8, 254.2, 320.1, 358, 365; 536/23.4, 23.51 [IMAGE AVAILABLE]
6. 5,728,377, Mar. 17, 1998, Methods and compositions incorporating IP-10; Andreas H. Sarris, et al., 424/85.1; 435/69.5; 530/351 [IMAGE AVAILABLE]
7. 5,707,805, Jan. 13, 1998, Assay for detecting keratinocyte growth factor (KGF) and its activity; Jeffrey S. Rubin, et al., 435/6, 7.1, 7.21 [IMAGE AVAILABLE]
8. 5,686,307, Nov. 11, 1997, Serum free medium for use in the formation of a histologically complete living human skin substitute; John Jacob Wille, Jr., 435/405, 383, 384, 404 [IMAGE AVAILABLE]
9. 5,686,116, Nov. 11, 1997, Methods of enhancing repair, healing and augmentation of bone implants; Richard Bockman, et al., 424/650; 514/8, 492 [IMAGE AVAILABLE]
10. 5,665,870, Sep. 9, 1997, Method of purifying keratinocyte growth factor (KGF); Jeffrey S. Rubin, et al., 530/412, 399, 417; 930/10 [IMAGE AVAILABLE]
11. 5,654,405, Aug. 5, 1997, Antibodies to human keratinocyte growth factor (KGF) and related pharmaceuticals; Jeffrey S. Rubin, et al., 530/387.9; 424/139.1, 141.1, 145.1; 435/336; 530/388.24, 389.2 [IMAGE AVAILABLE]
12. 5,650,317, Jul. 22, 1997, Human breast epithelial cell type with stem cell and luminal epithelial cell characteristics; Chia-Cheng Chang, et al., 435/371, 378 [IMAGE AVAILABLE]
13. 5,583,102, Dec. 10, 1996, Human thrombomodulin in wound healing; Steven R. Lentz, et al., 514/8, 12, 21; 530/350 [IMAGE AVAILABLE]
14. 5,364,785, Nov. 15, 1994, Method of isolating lung cell line; Jennie P. Mather, et al., 435/378, 4, 6, 29, 32, 70.1, 391 [IMAGE AVAILABLE]
15. 5,292,655, Mar. 8, 1994, Method for the formation of a histologically-complete skin substitute; John J. Wille, Jr., 435/384, 387; 623/15 [IMAGE AVAILABLE]

16. 5,262,298, Nov. 1993, Method to assess the ability of a substance to inhibit or stimulate keratinocyte autocrine factor production; Gary D. Shipley, et al., 435/6, 29; 436/63 [IMAGE AVAILABLE]
17. 4,940,666, Jul. 10, 1990, Process and defined medium for growth of human epidermal keratinocyte cells; Stephen T. Boyce, et al., 435/371, 405, 406, 408 [IMAGE AVAILABLE]
18. 4,673,649, Jun. 16, 1987, Process and defined medium for growth of human epidermal keratinocyte cells; Steven T. Boyce, et al., 435/378, 384, 387, 391, 405, 406, 408 [IMAGE AVAILABLE]
19. 4,016,036, Apr. 5, 1977, Process for serially culturing keratinocytes; Howard Green, et al., 435/347; 424/85.1; 435/173.1, 373, 391 [IMAGE AVAILABLE]